

CLAIMS

1. Converter (1) of digital signals (11) received in modulated and
5 multiplexed form, comprising means (21) for selecting (T1-Tn) at least one
part of the said signals (11) by adjustment at at least one determined
frequency and means for demodulating (DMD1-DMDn) the said parts,
capable of producing at least one demodulated subsignal (12),

10 the said converter (1) also comprising:

- means for demultiplexing (22, DMX1-DMXn) the said
subsignals (12), designed to extract portions (13) of the said subsignals (12);

~~- means for remultiplexing (23) the said portions (13) extracted~~
from at least one remultiplexed flow (14);

15 - and means for transforming (24) said remultiplexed flow (14),
designed to modify said remultiplexed flow (14) in compliance with specific
criteria for transmission to recipient receivers (R1-Rn), said transformation
means (24) being provided to modify said remultiplexed flow so as to make it
comply with at least one communication protocol,

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characterized in that said converter (1) comprises a unit
containing all of said means (21-24), as well as frequency downconversion
means (41) of the digital signals received, upstream of said selection means
(21).

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2. Converter (1) according to claim 1, characterized in that it is intended to
convert digital signals (11) transmitted by satellite.

3. Converter (1) according to one of claims 1 or 2, characterized in that it is
30 designed to convert digital signals transmitted on terrestrially, in accordance
with a communication technique chosen from a local multipoint
telecommunications system and a multipoint distribution system.

4. Converter (1) according to any one of the aforementioned claims,
characterized in that at least one of said communication protocols is a
protocol for communication to a digital network, preferentially chosen from
5 among the standards Ethernet, IEEE1394, IEEE802.11a, Hiperlan2 and a
powerline communication protocol.
5. Converter (1) according to any one of the aforementioned claims,
characterized in that the selection and demodulation means (21) are
10 designed to select and demodulate transmission digital channels in order to
produce said subsignals (12).
6. ~~Converter (1) according to any one of the aforementioned claims,~~
characterized in that the demultiplexing means (22) are designed to extract
15 audiovisual programmes constituting at least some of the said portions (13).
7. Converter (1) according to claim 6, characterized in that the
remultiplexing means (23) are capable of remultiplexing said portions (13)
into MPEG transport streams constituting said remultiplexed flows (14).
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8. Converter (1) according to any one of the aforementioned claims,
characterized in that it also comprises means for extracting (25) transmission
information (16) received from recipient receivers (R1-Rn), and in that the
transformation means (24) are capable of determining the transmission
25 criteria according to said transmission information.
9. Converter (1) according to any one of the aforementioned claims,
characterized in that it also comprises means for extracting (25) extraction
information (16) received from recipient receivers (R1-Rn), and in that the
30 transformation means (24) are capable of determining said subsignals (12)
and said portions (13) according to said extraction information.

10. Converter (1) according to any one of the aforementioned claims, characterized in that it also comprises means for modulating (27) feedback signals (17) from recipient receivers (R1-Rn).

511. Converter according to any one of the aforementioned claims, characterized in that it comprises means for receiving other digital signals received in modulated and multiplexed form and chosen from among the signals transmitted by cable and signals transmitted terrestrially in the UHF and VHF bandwidth, the said selection (21), demultiplexing (22),
10 remultiplexing (23) and transformation (24) means also being intended to be applied to the said other signals.

12. ~~Conversion procedure for digital signals (11) received in modulated and multiplexed form,~~ in which the received signals (11) are frequency
15 downconverted, an adjustment at at least one determined frequency selects at least one part of said signals (11) and these parts are demodulated so as to produce at least one demodulated subsignal (12),

said procedure comprising the following stages:

- demultiplexing of said subsignals (12), so as to extract portions
20 (13) of said subsignals (12),
- remultiplexing the said portions (13) extracted from at least one remultiplexed flow (14),
- and transformation of said remultiplexed flow (14) in accordance with specific criteria for transmission to recipient receivers (R1-
25 Rn), so as to render the remultiplexed flow (14) compliant with at least one communication protocol,

characterized in that all said stages of frequency downconversion, frequency adjustment, demodulation, demultiplexing, remultiplexing and
30 transformation are carried out by means of the same device (1, 51),

said conversion procedure being preferentially implemented by means of a converter (1) in accordance with any one of claims 1 to 11.